

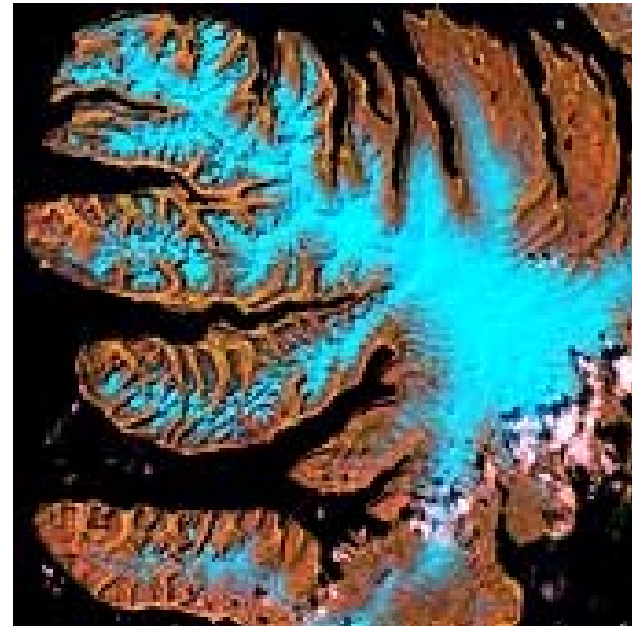
# Who is really responsible for environmental problems and their solutions? (a look in the mirror)

Doug Crawford-Brown  
Carolina Environmental Program  
UNC-Chapel Hill

A view...  
not from 500  
miles



or from  
50,000 feet



# but in...



# and in...to Cambridge



local action for a global change

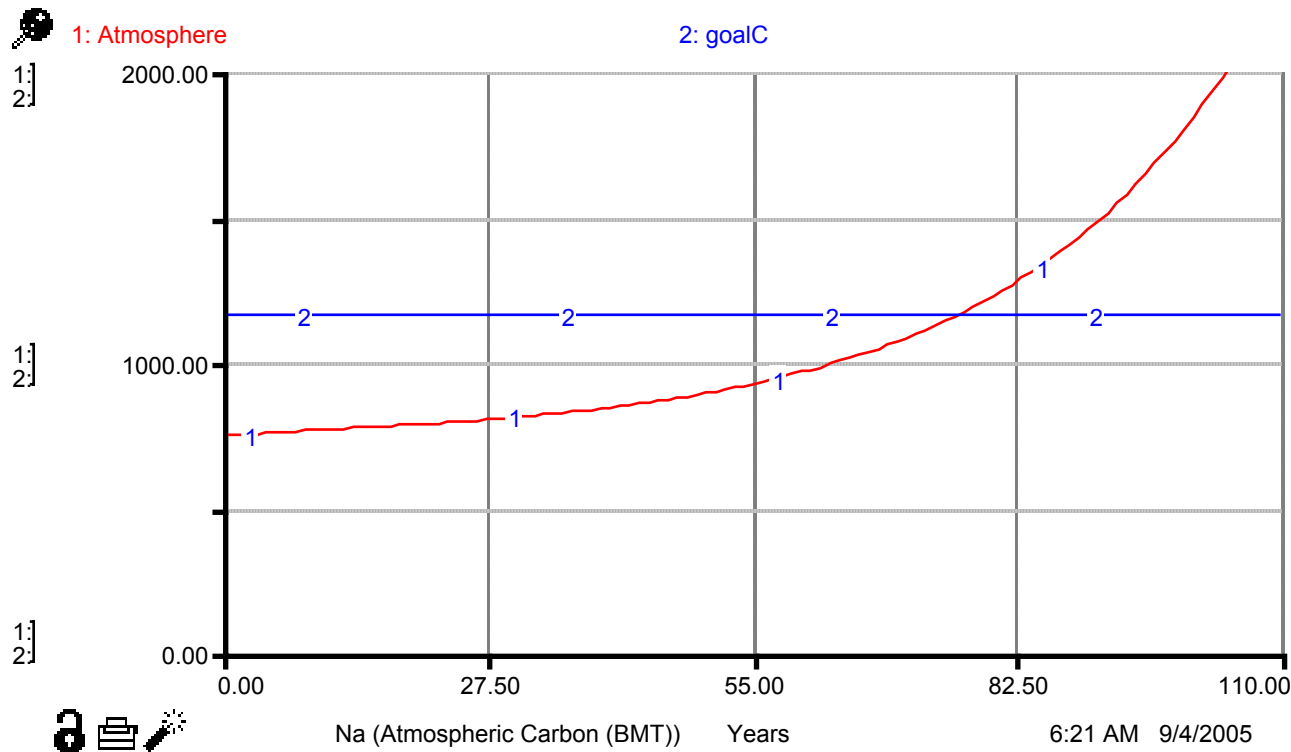




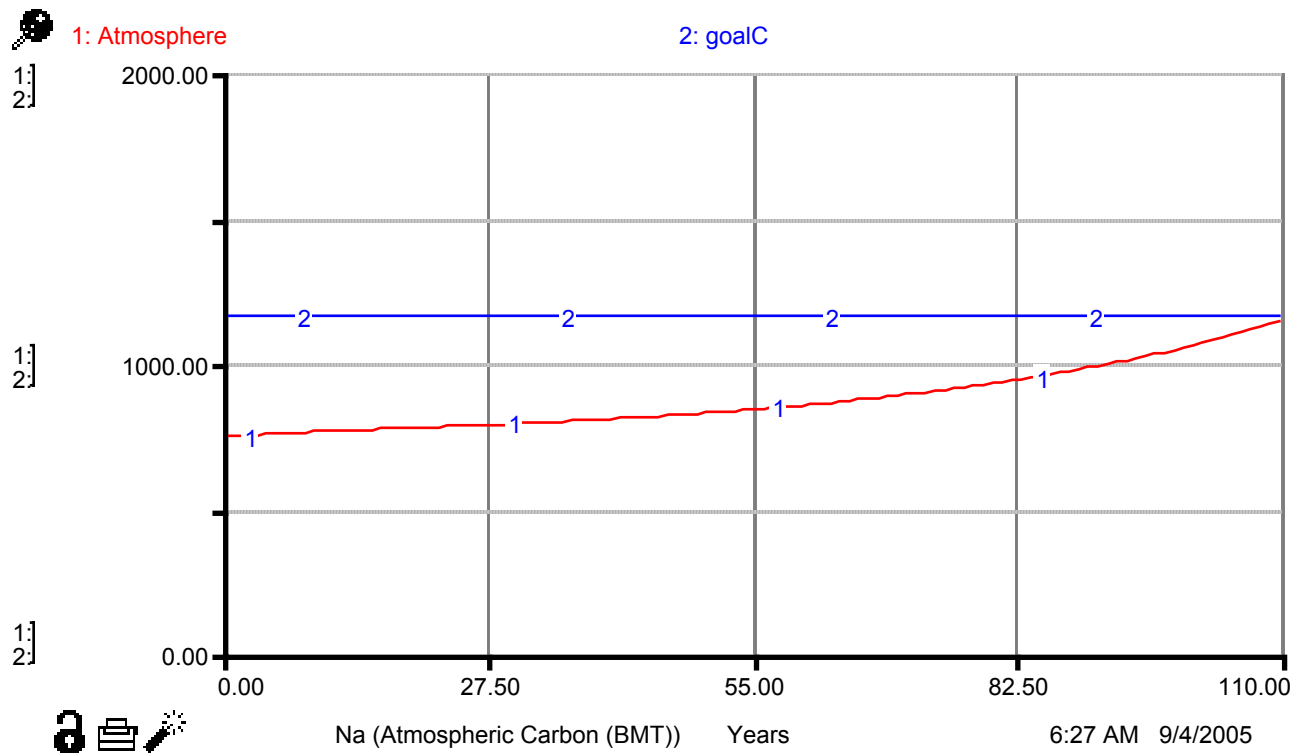
A Central Principle: People have legitimate needs. We ignore them at our peril.



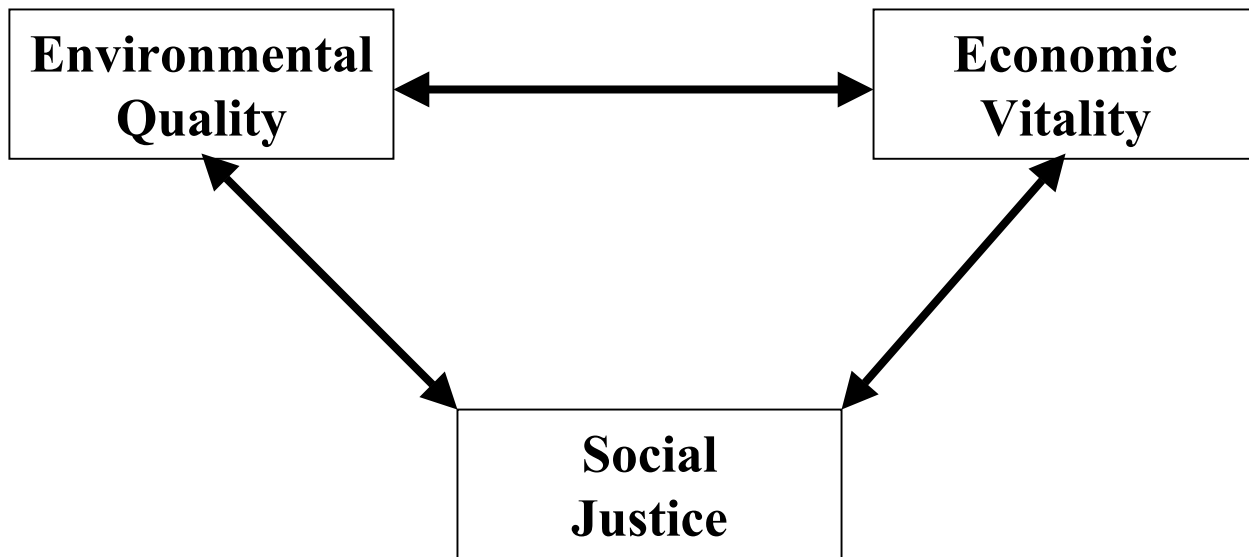
# But in meetings these needs, carbon dioxide may be released



# Cambridge has agreed to a policy of 60% reduction by 2050



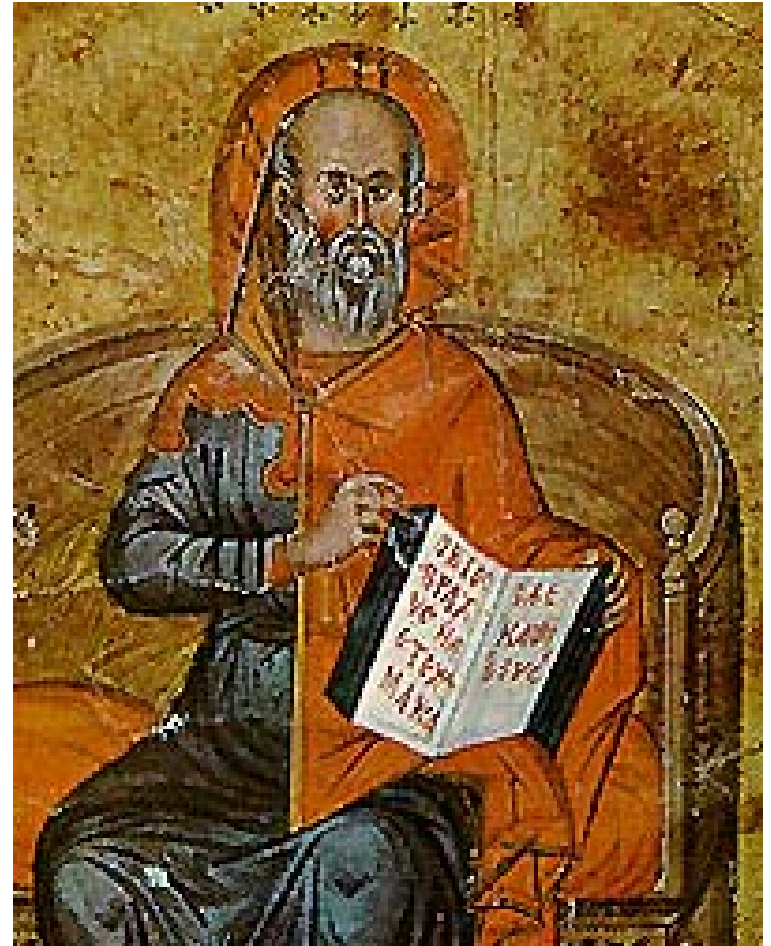
# A Central Principle: Needs are filled in sustainable communities



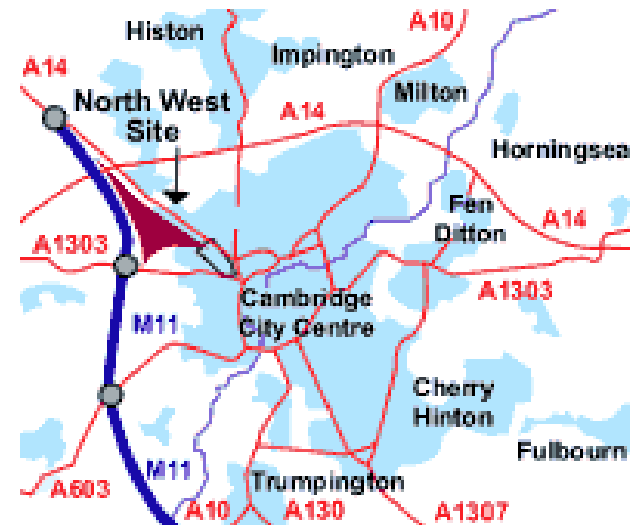
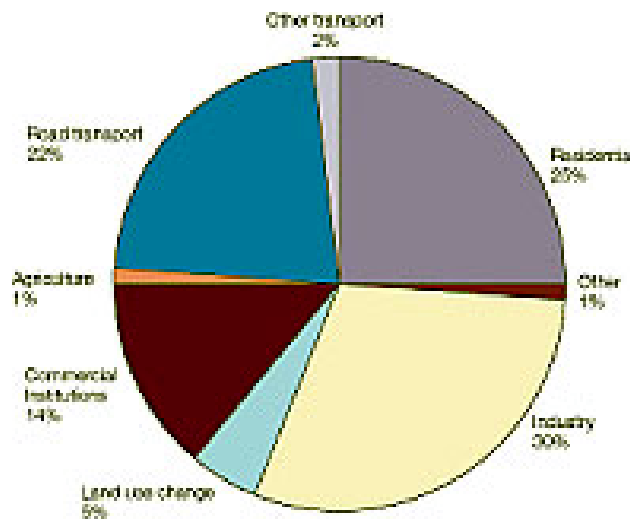


An analogy:  
What causes  
disease?

Air??  
Water?  
Places?



A Central Principle: Modern environmental problems like climate change must focus more on the design of place.



# The past solution?



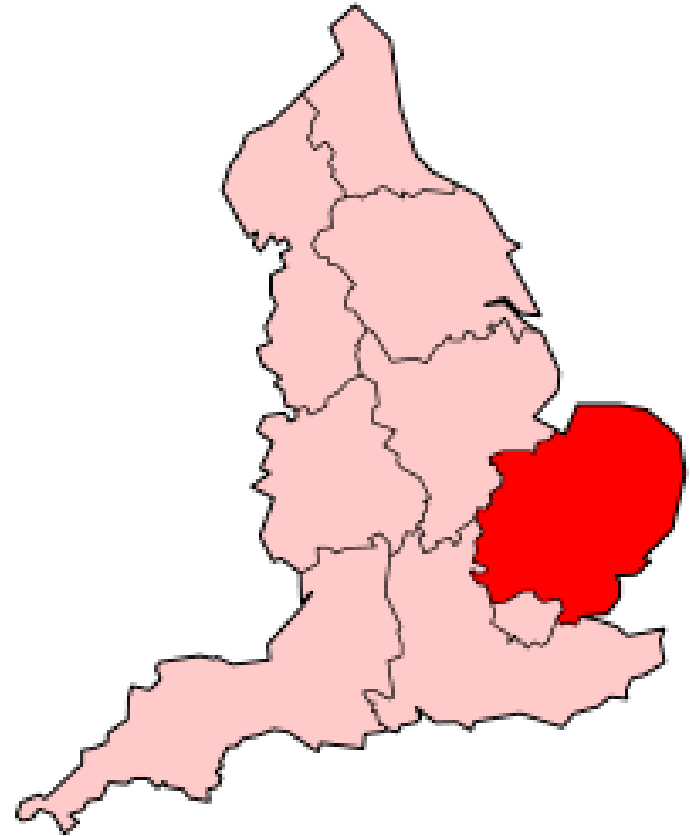
A Central Principle: This approach isn't going to work for carbon reduction

# Dividing up the causes and solutions



- ***Political regions***
  - Municipalities
  - Energy sectors
    - Institutions
    - Individuals

East of England  
Region:  
Balancing economic  
development, carbon  
reduction and  
population growth



# The regional development priorities

- Addressing high house prices and their impact on the recruitment and retention of staff.
- Improving railways, roads, airports and ports to meet the needs of economic growth.
- Ensuring the benefits of economic growth are spread across the region, particularly to those communities facing problems of deprivation.
- Addressing the development consequences of scarce water resources throughout the region and an increasing sea level for coastal areas.

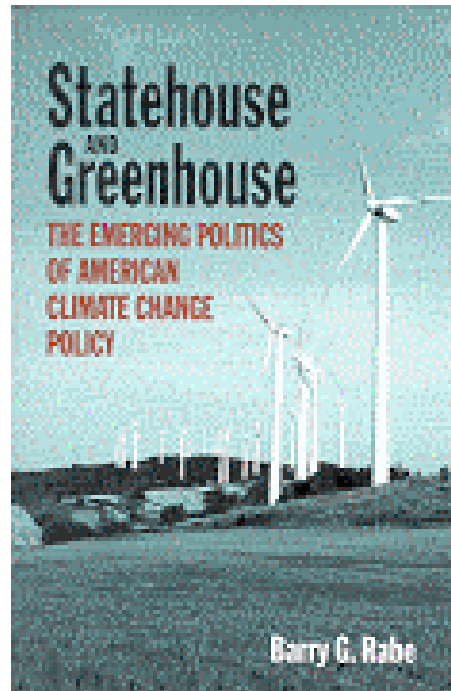




## Minister for Housing and Planning, Yvette Cooper:

"Today we are delivering on our government-wide commitment to ensure that building new homes goes hand in hand with the right provision of infrastructure and acknowledging that transport projects in particular are a catalyst for sustainable development."

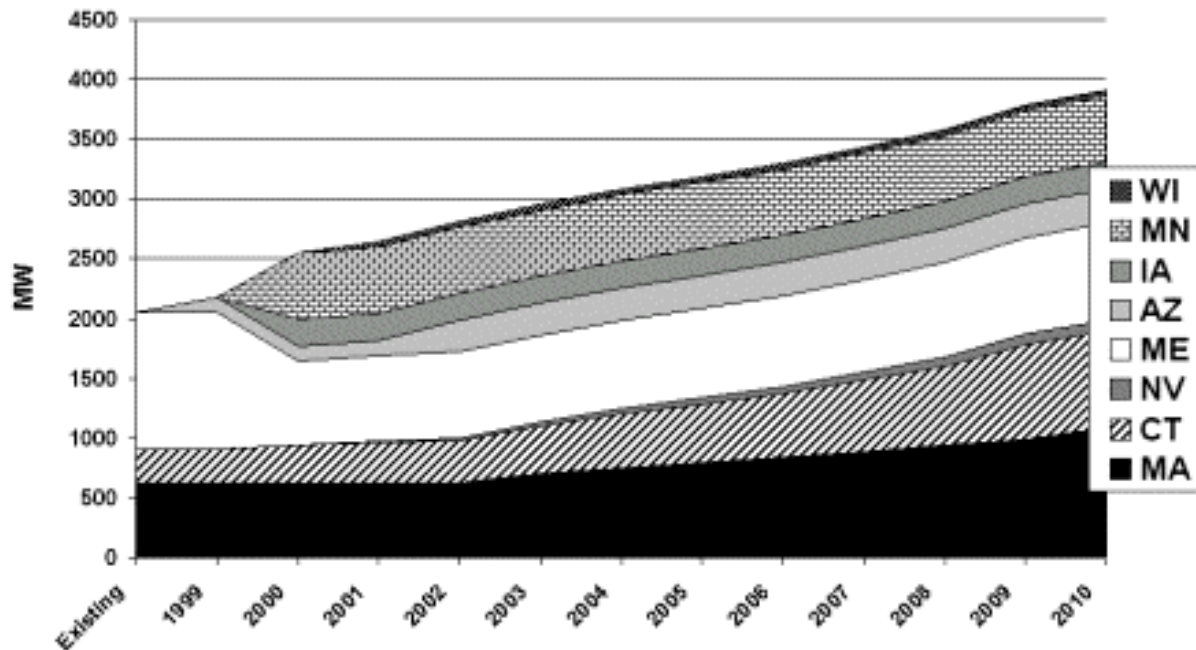
# Here, states take the lead



North Carolina Legislative Commission on Global Climate Change

# Including renewable portfolio standards

**Figure 13. State Minimum Renewable Energy Requirements**



# States and nations play on a stage that...

- Is created by competition and cooperation between nations
- Is created by the decisions voters make

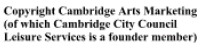


# Dividing up the causes and solutions



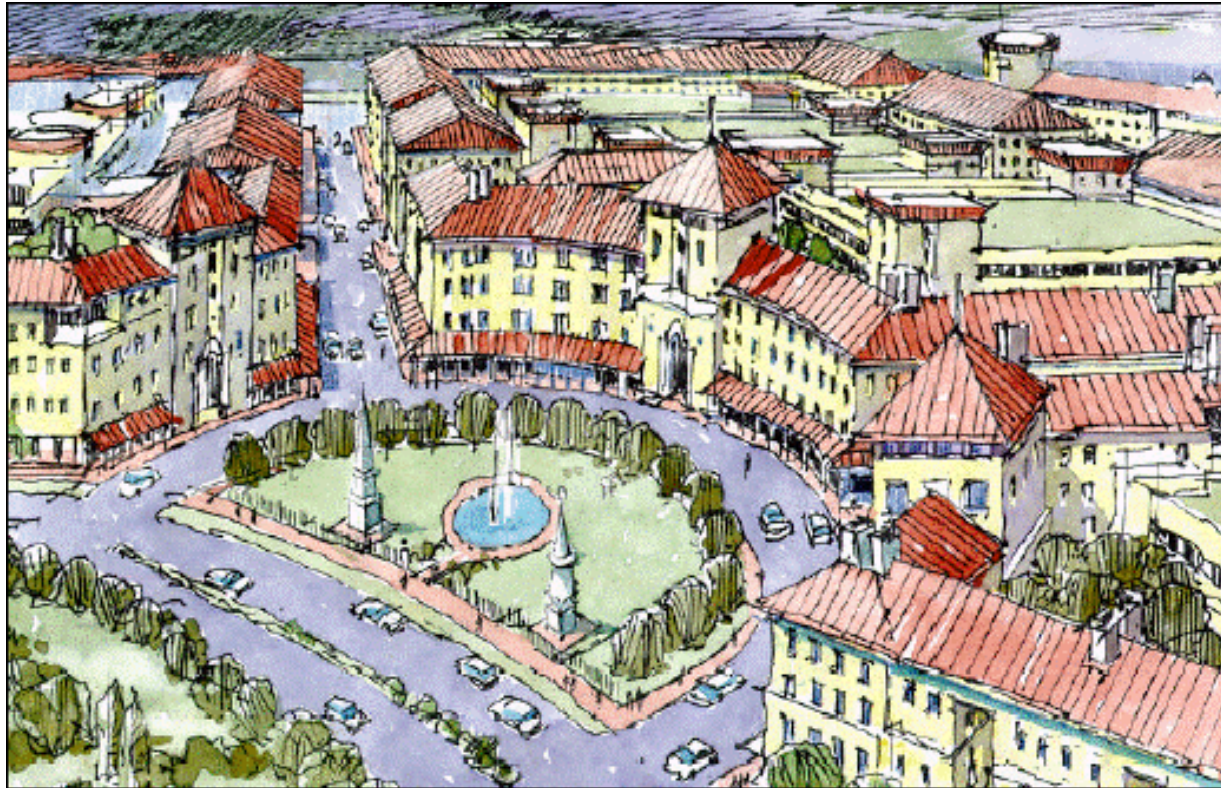
- Political regions
- *Municipalities*
- Energy sectors
  - Institutions
  - Individuals

(Issue: Greenbelts)





# And in Chapel Hill...



# Communities play on a stage that...

- Is created by demands of residents and response of developers
- Is created by the availability of technologies through the market



# Dividing up the causes and solutions



- Political regions
- Municipalities
- ***Energy sectors***
  - Institutions
  - Individuals

# Transport takes a lead...

**Residential**

**Commercial**

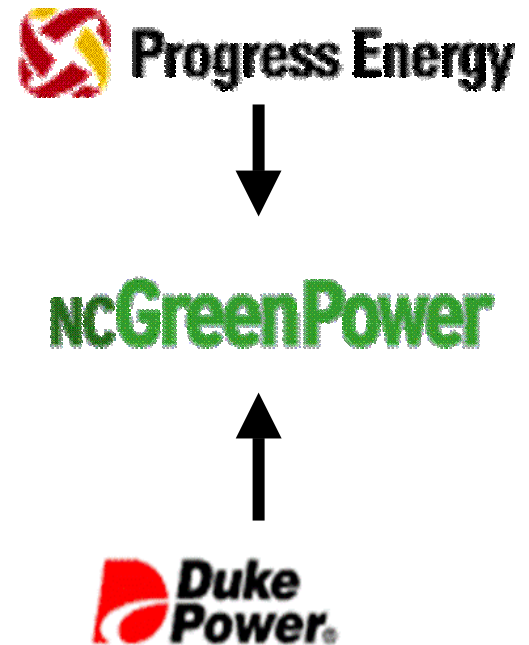
**Transport**

**Industrial**



# Utilities play on a stage that...

- Is created by the market decisions of consumers
- Is created by the policies of the state and nation in which they are governed (think Utilities Commission)





# Dividing up the causes and solutions

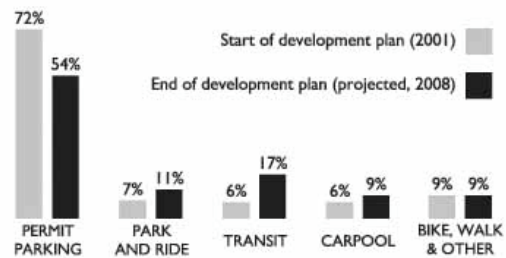


- Political regions
- Municipalities
- Energy sectors
- *Institutions*
- Individuals





## GETTING TO WORK



# Institutions play on a stage that...

- Is created by demands of employees
- Is created by the policies of the local communities



# Dividing up the causes and solutions



- Political regions
- Municipalities
- Energy sectors
- Institutions
- *Individuals*

# Dividing up the causes and solutions



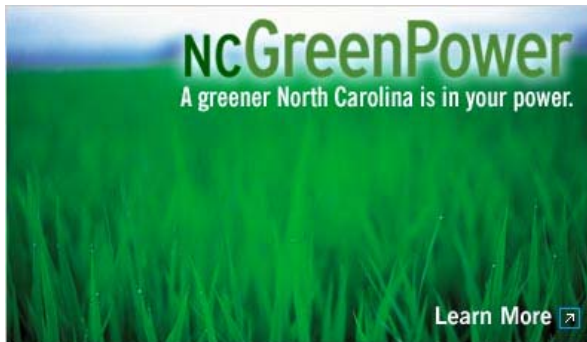
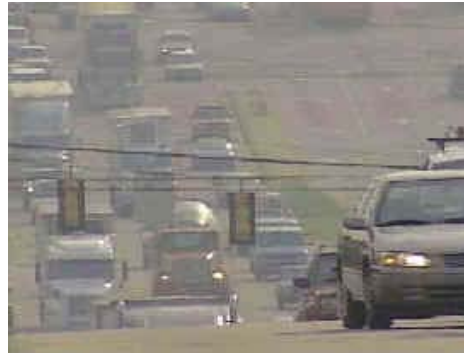
- Political regions
  - Municipalities
- Energy sectors
  - Institutions
- *Individuals*



# We each are carbon managers



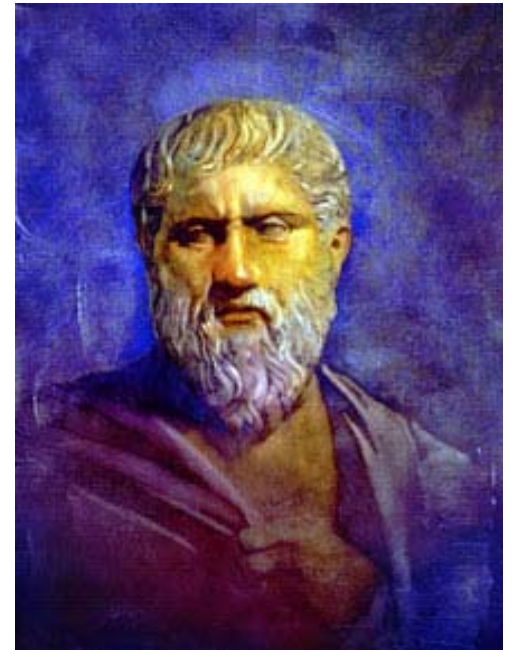
# But individuals make decisions between options available





# Individuals play on a stage that...

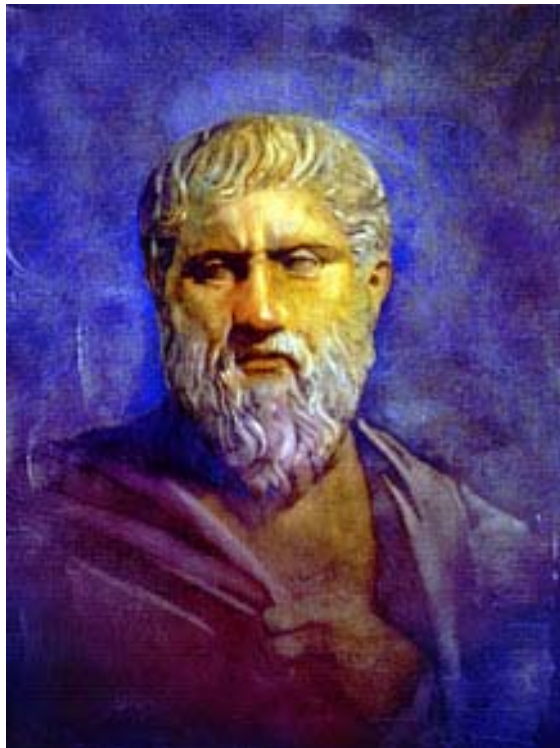
- Is created by the institutions in which they work
- Is created by the design of the communities in which they live



# It takes all working together...



# Plato's Republic



**Passions**

**Reason**

**Will**